



American Nuclear Society
Education, Training and Workforce Development Division

ETWDD Spring Newsletter
Spring 2019

It is a pleasure to present to you the Spring 2019 ETWD Division Newsletter. The purpose of this newsletter is to inform you of what has been happening in the Division since the 2018 Winter Meeting in Orlando, and to keep you apprised on some of the upcoming items that will be discussed at the upcoming Annual Meeting in June.

We look forward to seeing you in Minneapolis!

2018/2019 ETWDD officers:

Jane LeClair, Chair
Drew Thomas, Vice Chair
James Baciak, Secretary
Daniel Carleton, Treasurer
Matthew Jasica, Webmaster

Congratulations

Below are the new officers and members of ETWDD's Executive Committee effective June 13 after the Annual Meeting. Please welcome our new members and wish all success in the coming year!

Andrew Thomas – Chair
James E. Baciak – Vice Chair
Daniel Carleton - Secretary
R. Craig Williamson – Treasurer
Russell G. Coon - Executive Committee
Kyle C. Hartig - Executive Committee
Lisa Maria Marshall - Executive Committee
Justin K. Watson - Executive Committee

Annual Meeting Sessions

The 2019 ANS Annual meeting, entitled *The Value of Nuclear* will be held in Minneapolis, MN from June 9 – 13, 2019 at the Hyatt Regency Minneapolis. Additional information is located at the ANS website (http://www.ans.org/meetings/c_1). The Education, Training and Workforce Development Division is again showing its commitment to active meeting involvement by sponsoring the following sessions:

Teaching the Value of Nuclear—Nuclear Science in Pre-College Space—Panel, *Monday pm*

Pitch Your PhD—Panel, *Monday pm*

Training, Human Performance and Workforce Development, *Monday pm*

University Research in Fuel Cycle and Waste Management—I, *Tuesday am*

ANS Nuclear Grand Challenges, *Tuesday am*

University Research in Fuel Cycle and Waste Management—II, *Tues pm*

Focus on Communications: Meanwhile in Canada—How Communications Helped the Nuclear Industry to Expand—I—Panel, *Tuesday pm*

Focus on Communications: What are Your Non-Nuclear Friends REALLY Thinking?—II—Panel, *Tuesday pm*

Innovations in Nuclear Education—Panel, *Wednesday am*

Cutting Edge Techniques in Education, Training and Distance Education, *Thursday am*

ETWDD Attends National Academy of Engineering Workshop

On December 6th, Daniel Carleton, Treasurer of ETWDD, represented ANS at a workshop in Washington, DC hosted by the National Academy of Engineering (NAE). The theme of the workshop was “Engineering Societies' Activities in Helping Align Industry and Academia” and was attended by members of many different engineering societies including ASME and IEEE, as well as representatives from industry from companies like Boeing and Siemens. The organizer of the event from NAE reached out to ANS requesting the society send a representative and give a presentation.

The mission of the workshop was to share and exchange ideas on strategies engineering societies can undertake to foster closer relationships, communication, and collaboration between professionals in industry and academia. Daniel gave a 6-minute presentation on activities ANS undertakes to bring together industry and academia. The presentation mainly consisted of describing ANS national events where communication between industry and academia is fostered and encouraged through networking and committee meetings, with an emphasis on CONTE per the request of the event organizer.

Daniel heard directly from members of industry on what they are looking for in universities as well as strategies other engineering societies undertake to foster closer collaboration between industry and academia. The event was a success and the organizer expressed gratitude for ANS sending a representative to share insight.

Dr. Richard Coe awarded the Robert L. Long Training Excellence Award

The prestigious Robert L. Long Training Excellence Award is intended to recognize an individual who has demonstrated sustained excellence in nuclear training. Worthy candidates for the award are solicited by ANS and the Education, Training and Workforce Development Division (ETWDD) during the previous year. Nominees are individuals who are notable for being active in nuclear training and have exhibited ongoing dedication to the industry. The award is made to an individual who is currently working in the field of nuclear training and education, and is intended to recognize outstanding, innovative, unique and cost-effective contributions to the field.

On February 6, 2019 Dr. Jane LeClair, Chair of ETWDD, presented the Robert L. Long Training Excellence Award to Dr. Richard Coe at the 2019 CONTE Conference in St. Augustine, FL. Dr. Coe is currently the Assistant Dean, School of Applied Science and Technology at Thomas Edison State University. During his career, Dr. Coe has served the industry in many capacities including being an ABET team evaluator, reorganizing training programs at several nuclear stations, promoting and guiding the establishment of college credit for targeted facets of industrial training, and been very active in the ETWDD for many years in key leadership positions.



Conference on Nuclear Training and Education 2019

The bi-annual CONTE conference was held this year in St. Augustine, FL from February 5th-7th, 2019. Unlike previous meetings held over the past decade in Jacksonville, this event took place at the World Golf Village Renaissance St. Augustine Resort. The new venue provided participants with a unique experience and the opportunity to take advantage of the many attractions in the St. Augustine area.

The primary purpose of the gathering was the dissemination of nuclear related knowledge. This was accomplished through numerous meetings, lectures, presentations, one-on-one discussions, and notable plenary speakers. There were five speakers who delivered well received remarks during the 3-day event.

The conference began with the Opening Plenary by Captain David Roberts from the U.S. Naval Academy in Annapolis, Maryland. As a graduate of the academy, Captain Roberts has held a number of operational and staff positions over his career and focused on the training and development of Navy submariners. Captain Roberts began his presentation to CONTE with an engaging video on the current state and capabilities of the U.S. Navy's submarine force, and stressed that a 'culture of learning' is critical for success. He noted that this culture includes two important cornerstones, 1) training for both combat readiness and for operational safety, and 2) critical self-assessment to ensure getting to the root causes of problems, large and small.

Captain Roberts also discussed elements that are key to the effectiveness of any training program - the quality of instructors and evaluators, quality of course materials and content, and the ability to keep course content updated to reflect new or modernized equipment and systems. Captain Robert's presentation was an excellent and fitting kickoff for a conference focused on training, education and qualification of personnel involved in the design, construction, operation and maintenance of nuclear facilities.

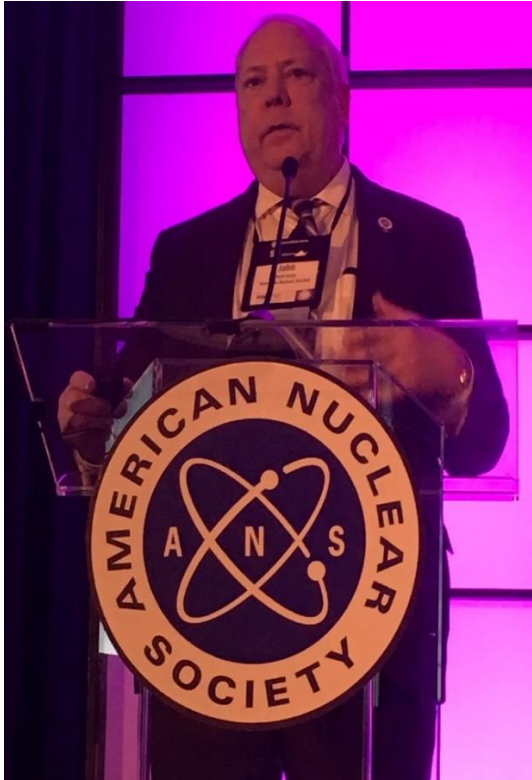
The conference was also fortunate to have ANS President John E. Kelly and Wei Huang from IAEA deliver remarks at plenary sessions. Kelly outlined his view of the potential growth of the nuclear industry and noted the important role for nuclear energy in providing the clean energy that is in increasing demand from an environmentally conscious public. He also delivered an encouraging message for a nuclear future that reinforced the need for nuclear energy education in primary, secondary, and post-secondary education to support future workforce demands.

As the Director of Division of Planning, Information and Knowledge Management for the International Atomic Energy Agency, Mr. Wei Huang provided an overview of the IAEA and its ongoing mission. This included a detailed discussion on the resources available to the IAEA, including its budget, staffing, publications and databases. He also noted that Nuclear Capacity Building is a major role of the IAEA and that the agency was responsible for providing support to its member states in nuclear economics, energy system planning, sustainable development issues, information management and dissemination, and nuclear knowledge management. He concluded by discussing the IAEA's role in promoting nuclear energy as a means of positively affecting climate change, and by summarizing the current state of the world-wide nuclear power industry.

At the Wednesday Plenary and Awards Luncheon on February 6th Wes Hines, Postelle Professor and Chancellor's Professor at the University of Tennessee at Knoxville (UT-K), delivered an overview of the transformation of the UT-K Nuclear Engineering Program (UTNE). Hines related how UT-K, through a systematic approach and a clear vision, has reshaped its nuclear engineering PhD program into one of the best in the country. For several years, the program conducted benchmarking assessments to identify performance metrics and used them to compare UTNE's performance to the top nuclear engineering programs in the country. According to Hines, the end result of this transformation has been spectacular, with UTNE now having both the largest Nuclear Engineering PhD enrollment in the history of the US for three straight years. Hines concluded his remarks by stating that the journey to the top required the university acquiring top faculty, staff, students, facilities, partners, and the resources.

Ms. Elisabeth M. Brattin, a Senior Vice President at the Institute of Nuclear Power Operators (INPO) spoke at the closing Plenary and Luncheon on February 7th. Ms. Brattin began her remarks by summarizing the status of the U.S. commercial nuclear energy industry. She also noted the impressive performance of the commercial fleet and believes that this performance is due, in part, to the training programs the utilities maintain. Brattin mentioned that in INPO's opinion, the four areas that allow organizations to maintain strong performance include: strong leadership and talent development, excellent standards, continuous learning and self-awareness and self-correction. According to her, INPO has focused on these pillars to help the domestic nuclear fleet excel. Ms. Brattin concluded with a focus on INPO's goals for 2019, one of which will be to seek and define the key attributes of self-awareness and self-correction. This effort will provide the domestic nuclear utility with the final tool to help nuclear sites to consistently maintain strong performance.

Throughout the conference, the presentations and remarks provided by the plenary speakers provided attendees with insights into the current state of the industry, its future, and the key role that training and education play in continuing to maintain an industry that is focused on efficiency, productivity and most importantly – safety. Knowledge that can be transferred to the workplace was passed along to the attendees via breakout sessions and small group meetings each day. This information sharing will support the industry as we progress into the next few decades and meet the many challenges ahead.





John Kelly, ANS President
Dr. Wesley Hines
Brattin
Tuesday Plenary
Wednesday Plenary
Plenary

Captain David Roberts
Mr. Wei Huang

Elisabeth

Opening Plenary
Tuesday Plenary

Wednesday